



STATE OF TENNESSEE
**DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF UNDERGROUND STORAGE TANKS**

4th Floor L & C Tower
401 Church St.

Nashville, Tennessee 37243-1541

PHONE (615) 532-0945 STATEWIDE 1-800-258-0826 FAX (615) 532-9759

To All Tennessee Corrective Action Contractors, UST Installers, Petroleum Distributors, and UST Maintenance/Service Personnel:

All Tennessee petroleum underground storage tank owners were recently sent a letter from our Division alerting them to the possibility of potential problems with some flexible plastic piping. This letter encouraged them to make periodic visible inspections of their piping and dispenser sumps and be aware of our concerns for potential problems where the exterior of this piping has been in extended contact with petroleum substances. Our letter references a similar letter the State of Mississippi sent to their tank owners publishing a list of "early warning signs" to look for when visibly inspecting previously installed flexible piping and reads, in part, as follows:

"While it is likely that most flex pipe systems will not experience significant problems, we urge you to closely inspect your piping system at this time and continue to periodically inspect the piping system. It is very important that no fuel be allowed to remain in the secondary containment sumps of these systems. In addition to your normal leak detection activities, we encourage you to visibly inspect the piping by opening your dispenser cabinets and submersible pump manways. Visible evidence that might indicate the integrity of the piping is compromised includes:

- The ells, tees, riser pipes and flex connectors found within the sumps where the piping is terminated may be twisted, over stressed or pushed out of normal alignment.
- The pipe may be over bent within the tank sump or it may be folding over on itself (kinked).
- The outer jacket of double-walled (coaxial) piping may be extended over the metallic ferrule of the pipe coupling.
- The outer jacket of double-walled (coaxial) piping may be splitting as it attempts to grow over the metallic coupling.
- The pipe may be swelling and appear to be bulging or "ballooned".
- The pipe may be wrinkling or it may be sticky/spongy and softer than it was originally.

- The outer walls of the primary pipe and/or the secondary jacket may be cracking.
- The rubber boots that are installed in the walls of the containment sumps may be stretched or torn.
- The donuts that make up part of the boot of some pipe systems may be dislodged or the clamps may not be in place.
- The rubber "test" boots that are installed at the pipe terminations of some coaxial pipe systems may appear to be compressed or distorted.
- The metallic ferrules that are part of some pipe system couplings may be cracked.
- Piping manufactured prior to 1994 that is yellow in color may be delaminating and a fungus/microbial growth may be attacking the outer walls of the pipe.

.... You should inspect your piping periodically and if you notice any of these "early warning signs" it could be indicative of an impending piping failure. You should contact your service company if you notice any problems with your piping.

Some piping configurations which rely on sump sensors to detect a catastrophic leak could allow for a very large release if a sump sensor fails to engage or operate properly. If you only have sump sensors we encourage you to add mechanical or electronic line leak detection as a precautionary and preventive measure. A large release of product piping under pressure not only would mean a large product loss but could have disastrous results. A service call before a piping leak can prevent serious problems from occurring later and give you peace of mind. The costs of correcting problems early will be much less than the cost and business interruption from cleaning up a release from a failed product line."

The Tennessee Petroleum Underground Storage Tank Board has encouraged us to send this information to all tank owners and others engaged in different aspects of the underground storage tank business. As you interact with tank owners during the course of your business, please encourage them to check their sumps periodically and do not allow product to come in contact with flexible piping. If you notice potential problems when you are on site such as flexible piping immersed in liquid, please point it out to the tank owner so that this situation can be corrected. We appreciate your assistance in raising the level of awareness of this issue among tank owners.

Sincerely,

A handwritten signature in black ink that reads "Wayne Gregory". The signature is written in a cursive, flowing style with a long, sweeping underline.

Wayne Gregory, Director